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APPLICATION NO. FILING DATE		ING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/026,826	12	2/27/2001	Sang-Ho Choi	P67479US0	9854
43569	7590	12/13/2005		EXA	MINER
MAYER, E 1909 K STR		ROWE & MAW L	HOM, SHICK C		
WASHINGTON, DC 20006				ART UNIT	PAPER NUMBER

DATE MAILED: 12/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		( <del>\</del>				
	Application No.	Applicant(s)				
	10/026,826	CHOI ET AL.				
Office Action Summary	Examiner	Art Unit				
	Shick C. Hom	2666				
The MAILING DATE of this communication a Period for Reply	ppears on the cover sheet w	vith the correspondence address				
A SHORTENED STATUTORY PERIOD FOR REF WHICHEVER IS LONGER, FROM THE MAILING  - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory perions are reply within the set or extended period for reply will, by stated and the period for reply will be set or	DATE OF THIS COMMUN 1.136(a). In no event, however, may a od will apply and will expire SIX (6) MO ute, cause the application to become A	ICATION. The reply be timely filed PATHS from the mailing date of this communication. ABANDONED (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on <u>02</u>	November 2005.					
2a) This action is <b>FINAL</b> . 2b) ⊠ Th	<u> </u>					
•	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under	r <i>Ex parte Quayle</i> , 1935 C.	D. 11, 453 O.G. 213.				
Disposition of Claims						
4) ☐ Claim(s) 1-6 is/are pending in the application 4a) Of the above claim(s) is/are withden 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-6 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and	rawn from consideration.					
Application Papers						
9)☐ The specification is objected to by the Exami						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the	·					
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the priority docume application from the International Bure * See the attached detailed Office action for a list	nts have been received.  nts have been received in a iority documents have been eau (PCT Rule 17.2(a)).	Application No n received in this National Stage				
Attachment(s)	<b></b>	Current (DTO 44C)				
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No	Summary (PTO-413) (s)/Mail Date				
Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0 Paper No(s)/Mail Date	8) 5) Notice of 6) Other:	Informal Patent Application (PTO-152)				

Application/Control Number: 10/026,826 Page 2

Art Unit: 2666

### DETAILED ACTION

## Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/2/05 has been entered.

### Response to Arguments

2. Applicant's arguments with respect to claims 1-6 have been considered but are moot in view of the new ground(s) of rejection.

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at

the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 5. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barna (2002/0046277) in view of Madour (2002/0021681).

## Regarding claim 1:

Barna discloses the method for performing a hard handoff (see paragraph 0019 which recite inter-PDSN handoff of a mobile station), comprising: (a) setting up a channel link passing through a target base station controller (T-BSC) associated with a target-PDSN (T-PDSN), a source base station controller (S-BSC) associated with a source-PDSN (S-PDSN), a source packet control

Art Unit: 2666

function (S-PCF) and the S-PDSN by establishing a channel link between the S-BSC and the T-BSC in an active packet session mode (in Fig. 2 see the link passing through the target-BSC 64, the source-BSC 61, the source PCF 62, the source-PDSN 63, the target-PDSN 66, including the link between the source-BSC 61 and target-BSC 64 and paragraph 0016 which recite establishing the handoff during the data session); (b) performing the hard handoff between the S-BSC, the T-BSC and a mobile station (MS) (see paragraph 0039-0040 which recite the inter-PDSN handoff of a mobile station from the source base station controller and the target BSC); and (c) transmitting or receiving user packet data exchanged between the MS and the T-BSC through the established channel link to or from the S-PDSN in case the hard handoff is completed (see paragraphs 0035, 39, and 0041 which recite at the completion of the handoff the associated T-BSC and the T-PDSN). Regarding claim 2:

Barna et al. disclose further comprising the steps of: (d) establishing a channel link between the T-BSC, a target packet control function (T-PCF) and a target-PDSN (TPDSN) in a dormant packet session mode (see Fig. 2 which shows the link between the T-BSC, T-PCF and T-PDSN and paragraph 0043 which recite the dormant packet session mode); (e) releasing the channel link set up between the S-BSC, the S-PCF and the S-PDSN (see paragraph

Application/Control Number: 10/026,826

Art Unit: 2666

0043 which recite releasing the S-PDSN); and (g) performing a point-to-point (PPP) establishing process and a mobile Internet protocol (MIP) registering process between the MS and the T-PDSN (see paragraph 0040 which recite the MS engaged in the internet session including the registration request message to the PDSN-2 to establish the PPP connection).

For claims 1-6, Barna et al. disclose all the subject matter of the claimed invention with the exception of the mobile station center for setting up the channel link passing through the T-BSC, S-BSC, S-PCF, S-PDSN as in claims 1, 2; wherein the step (a) includes the step of: (al) transmitting a Handoff Required message from the S-BSC to the MSC and establishing the channel link between the S-BSC and the MSC as in claim 3; wherein, in the step (al), the channel link between the S-BSC and the MSC is established by including a circuit identification code (CIC) as an extender in the Handoff Required message as in claim 4; wherein the step (a) includes the step of: (a2) transmitting a Handoff Request message from the MSC to the T-BSC and establishing the channel link between the MSC and the T-BSC as in claim 5; and wherein, in the step (a2), the channel link between the MSC and the T-BSC is set up by including a circuit identification code (CIC) as an extender in the Handoff Request message as in claim 6.

Application/Control Number: 10/026,826

Art Unit: 2666

Madour from the same or similar fields of endeavor teach that it is known to provide the mobile station center for setting up the channel link passing through the T-BSC, S-BSC, S-PCF, S-PDSN (see Fig. 3b, the MSC 36, the BSC-T 34, BSC-S 32, PCF-S 33, and PDSN-S 37); wherein the step (a) includes the step of: (al) transmitting a Handoff Required message from the S-BSC to the MSC and establishing the channel link between the S-BSC and the MSC (see Fig. 2, the handoff required message 202 from the BSC-S 22 to MSC 26); wherein, in the step (al), the channel link between the S-BSC and the MSC is established by including a circuit identification code (CIC) as an extender in the Handoff Required message (see paragraph 0022 which recite the handoff required message to the MSC includes information and address to help with the handoff clearly reads on the circuit identification code (CIC)); wherein the step (a) includes the step of: (a2) transmitting a Handoff Request message from the MSC to the T-BSC and establishing the channel link between the MSC and the T-BSC (see Fig. 2 the Request message 204 from the MSC 26 to the T-BSC 24); and wherein, in the step (a2), the channel link between the MSC and the T-BSC is set up by including a circuit identification code (CIC) as an extender in the Handoff Request message (see paragraph 0022 which recite the handoff required message to the MSC includes information and

Art Unit: 2666

address to help with the handoff clearly reads on the circuit identification code (CIC)).

Thus, it would have been obvious to the person having ordinary skill in the art at the time the invention was made to provide the mobile station center for setting up the channel link; wherein the step (a) includes the step of: (al) transmitting a Handoff Required message from the S-BSC to the MSC and establishing the channel link between the S-BSC and the MSC; wherein, in the step (al), the channel link between the S-BSC and the MSC is established by including a circuit identification code (CIC) as an extender in the Handoff Required message; wherein the step (a) includes the step of: (a2) transmitting a Handoff Request message from the MSC to the T-BSC and establishing the channel link between the MSC and the T-BSC; and wherein, in the step (a2), the channel link between the MSC and the T-BSC is set up by including a circuit identification code (CIC) as an extender in the Handoff Request message as taught by Madour in the communications method of Barna et al. The mobile station center; wherein the step (a) includes the step of: (al) transmitting a Handoff Required message from the S-BSC to the MSC and establishing the channel link between the S-BSC and the MSC; wherein, in the step (al), the channel link between the S-BSC and the MSC is established by including a

Page 8

Art Unit: 2666

circuit identification code (CIC) as an extender in the Handoff Required message; wherein the step (a) includes the step of: (a2) transmitting a Handoff Request message from the MSC to the T-BSC and establishing the channel link between the MSC and the T-BSC; and wherein, in the step (a2), the channel link between the MSC and the T-BSC is set up by including a circuit identification code (CIC) as an extender in the Handoff Request message can be implemented by connecting the MSC including the transmission of Handoff Required message and circuit identification code being as an extender in the Handoff Request message of Madour between the MS, source-BSC, target-BSC, and the PDSNs of Barna et al. The motivation for using the MSC including the transmission of Handoff Required message and circuit identification code being as an extender in the Handoff Request message as taught by Madour in the communication method of Barna et al. being that it provides more efficiency for the system since the system uses a single center for handoff of the mobile station rather than having duplicate circuits for inter-PDSN handoff.

#### Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 2666

Eyuboglu et al. disclose broadcasting and multicasting in wireless communication.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shick C. Hom whose telephone number is 571-272-3173. The examiner can normally be reached on Monday to Friday with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/026,826 Page 10

Art Unit: 2666

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